

Changes made in the C4 PGE11 LSR code

- 1. Improvement in the internal cloud mask (more clouds flagged)
- 2. Introduction of cloud shadow (geometric approach)
- 3. Improvement in internal fire mask (false detections) improve aerosol retrieval.
- 4. Improvement in the aerosol interpolation scheme (low and high resolution).
- 5. Improvement in aerosol retrieval (filter more bright areas), check consistency of corrected reflectance.
- 6. Set Cirrus bits



- 1. Use MOD09 internal cloud mask in the observation selection process.
- 2. Change the compositing scheme to select clear observations with maximum observation coverage that are closest to the nadir view.
- 3. Add logic to handle inconsistencies in the input data. This will avoid ungraceful exit of the code if bad inputs are used.
- 4. Add support for the SIN grid.



Forthcoming improvements: PGE11

- 1. Correction of issues with the cloud mask over inland water / improvement in cloud masking (edge of clouds). End of the week delivery 8 days test needed.
- Noise in short wave infrared (detector equalization). Prototype developed. delivery prior to Nov00 data processing. Intensive test needed.
- 3. Improvement of retrieval/correction in bright areas (use of 412nm or ancillary sources). Before Nov 00 data processing. Test needed
- 4. Use of new LUT based on dynamic aerosol model (Collection 5)
- 5. BRDF coupling correction (shape approach) (Collection 5)
- 6. Adjacency effect correction (Collection 5)



Forthcoming improvements: PGE21

- 1. Correction in scoring (aerosol climatology), code delivered test before reprocessing
- 2. Aqua/Terra PGE (Collection 4/5)?